

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A mercury vapor discharge lamp comprising a light-transmissive glass envelope, an electrode disposed within said glass envelope to provide a discharge, a phosphor layer coated adjacent an inner surface of said envelope, a fill gas of mercury and an inert gas sealed inside said envelope, and a rare earth oxide layer substantially uniformly disposed over a surface of said electrode, said oxide layer being formed from an emission mix slurry, said slurry comprising 20-50 wt.% suspension medium and 50-80 wt.% carbonate powder as suspended solids, said suspension medium being selected from the group consisting of (a) organic materials having a vapor pressure of less than 0.1 mm Hg at 20°C, and (b) water.

Claim 2 (currently amended): A mercury vapor discharge lamp comprising a light-transmissive glass envelope, an electrode disposed within said glass envelope to provide a discharge, a phosphor layer coated adjacent an inner surface of said envelope, a fill gas of mercury and an inert gas sealed inside said envelope, and a rare earth oxide layer substantially uniformly disposed over a surface of said electrode, said oxide layer being formed from an emission mix slurry, said slurry comprising 20-50 wt.% suspension medium and 50-80 wt.% carbonate powder as suspended solids, said suspension medium being selected from the group consisting of (a) organic materials having a vapor pressure of less than 0.1 mm Hg at 20°C, and (b) water. A lamp according to claim 1, said electrode having a

secondary coiling, said secondary coiling having a secondary length, said oxide layer being coated on said secondary coiling and having a coating weight of 0.2-0.6 mg/mm along said secondary length, said coating weight being substantially uniform over said secondary coiling along said secondary length.

Claim 3 (original): A lamp according to claim 2, said coating weight being about 0.335 mg/mm.

Claim 4 (original): A lamp according to claim 2, said electrode further having a tertiary coiling.

Claim 5 (currently amended): An emission mix slurry for coating onto a fluorescent lamp electrode, said slurry comprising 20-50 wt.% suspension medium and 50-80 wt.% carbonate powder as suspended solids, said suspension medium being selected from the group consisting of ~~(a)~~ organic materials having a vapor pressure of less than 0.1 mm Hg at 20°C, ~~and (b) water.~~

Claim 6 (currently amended): A slurry according to claim 5, ~~wherein said suspension medium is an organic suspension medium~~ having a sufficiently high oxygen content such that it is cleanly oxidized to substantially only CO₂ and H₂O_(vap) upon activation of said slurry via application of an electric current.

Claim 7 (currently amended): A slurry according to claim ~~[[4]]~~ 5, wherein said suspension medium is polyethylene glycol 200.

Claim 8 (currently amended): An emission mix slurry for coating onto a fluorescent lamp electrode, said slurry comprising 20-50 wt.% suspension medium and 50-80 wt.% carbonate powder as suspended solids, said suspension medium being ~~A slurry according to claim 5, wherein said suspension medium is~~ deionized

water.

Claim 9 (original): A slurry according to claim 8, said slurry further comprising at least one additive selected from the group consisting of dispersants, thickeners and binders.

Claim 10 (original): A slurry according to claim 5, wherein said suspension medium is selected from the group consisting of polyethylene glycol 300, glycerin and ethylene glycol monomer, and mixtures thereof.

Claim 11 (original): A slurry according to claim 5, wherein said carbonate powder comprises a mixture of calcium carbonate, barium carbonate and strontium carbonate.

Claim 12 (currently amended): A slurry according to claim ~~[[11]]~~ 5, said carbonate powder having a mean particle size of 3-20 μm .

Claim 13 (currently amended): An emission mix slurry for coating onto a fluorescent lamp electrode, said slurry comprising 20-50 wt.% suspension medium and 50-80 wt.% carbonate powder as suspended solids, said suspension medium being selected from the group consisting of (a) organic materials having a vapor pressure of less than 0.1 mm Hg at 20°C, and (b) water, A slurry according to claim 11, wherein, said carbonate powder comprising a mixture of calcium carbonate, barium carbonate and strontium carbonate, the ratio of calcium carbonate : barium carbonate : strontium carbonate in said carbonate powder is being about 50:40:10 or about 50:30:20 by weight.

Claim 14 (currently amended): An emission mix slurry for coating onto a fluorescent lamp electrode, said slurry comprising 20-50 wt.% suspension medium

and 50-80 wt.% carbonate powder as suspended solids, said suspension medium being selected from the group consisting of (a) organic materials having a vapor pressure of less than 0.1 mm Hg at 20°C, and (b) water. A slurry according to claim 11, said carbonate powder further comprising barium carbonate, strontium carbonate, calcium carbonate and zirconium carbonate, the ratio of barium carbonate : strontium carbonate : calcium carbonate : zirconium carbonate being 59:22.3:15.1:3.6 by weight.

Claim 15 (currently amended): A slurry according to claim [[6]] 5, further comprising less than [[5]] 10 wt.% zirconia powder.

Claim 16 (original): A slurry according to claim 15, said zirconia powder having a mean particle size of 0.001-5 μm .

Claim 17 (original): A slurry according to claim 5 further comprising less than 1 wt.% wetting agent.

Claim 18 (original): A slurry according to claim 5, wherein 100 grams of said slurry retains at least 95% of its initial specific gravity for at least 24 hours under ambient conditions of 1 atm and 22°C in an open beaker.

Claim 19 (original): A slurry according to claim 5, wherein 100 grams of said slurry retains at least 95% of its initial specific gravity for at least 48 hours under ambient conditions of 1 atm and 22°C in an open beaker.

Claim 20 (original): A slurry according to claim 5, said suspended solids remaining in suspension for at least 2 hours without requiring mixing to re-suspend settled solids.

Claim 21 (original): A slurry according to claim 5, said suspended solids remaining in suspension for at least 24 hours without requiring mixing to re-suspend settled solids.

Claim 22 (new): A mercury vapor discharge lamp comprising a light-transmissive glass envelope, an electrode disposed within said glass envelope to provide a discharge, a phosphor layer coated adjacent an inner surface of said envelope, a fill gas of mercury and an inert gas sealed inside said envelope, and a rare earth oxide layer substantially uniformly disposed over a surface of said electrode, said oxide layer being formed from an emission mix slurry, said slurry comprising 20-50 wt.% suspension medium, and greater than 50 wt.% and not more than 80 wt.% carbonate powder as suspended solids, said suspension medium being selected from the group consisting of (a) organic materials having a vapor pressure of less than 0.1 mm Hg at 20°C, and (b) water.

Claim 23 (new): A lamp according to claim 22, comprising 60-80 wt.% carbonate powder as suspended solids.